THE AMERICAN ARCHITECT AND BUILDING NEWS.

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OUR first issue has been retarded; but we hope to be punctual in the future. The difficulties of the complete organization of an undertaking like that which we begin with this number are very considerable; and our readers will not be surprised if it takes some time to bring our paper to the completeness we desire to give it in its various parts. To this end we invite the aid of those who are interested in the objects we pursue, and shall welcome contributions on the topics we treat of from those who have given study to them. Our journal will have its own opinions, and will express them when it sees occasion; but it is prepared to respect those of other people, and to give them a courteous welcome to its columns when it can, though they should differ from its own.

The prospectus already issued sufficiently explains the purposes of our paper. We shall be thankful to everybody who will help to provide us with items of local interest, either by letters, or by extracts from journals which might not meet the editor's eye; begging them to remember that what is stale in its own neighborhood may be new in others. We would request those who may offer us subjects for illustration, to send with them descriptions as detailed as possible; and would urge them especially to add plans to all drawings of exteriors, which for lack of them lose much of their due interest. The editor will send to any who wish it a circular with directions for preparing drawings to suit the process by which the illustrations are made.

THE Ninth Annual Convention of the American Institute of Architects was in session in Baltimore on the 17th, 18th, and 19th of November. The published report of their proceedings will be found in another column. The convention was well attended, and its discussions were of more than ordinary interest in a business aspect. The most interesting subject discussed was a bill to establish a Bureau of Architecture, which had been prepared by the Board of Trustees of the Institute, with a view to offering it at the next session of Congress. The bill was considered at length, and finally referred to a committee with power to act in consultation with the supervising architect of the treasury department.

The annual address was read by Mr. Van Brunt, of the Boston Chapter. The old board of officers was re-elected, and reports received from the various officers, committees, and chapters, of which the most important was that of the Committee on Professional Practice, concerning competitions. A blank form for a building contract was read, and without much discussion referred to the Board of Trustees. Several papers were read by members, on subjects of professional interest; a resolution was passed, making The American Architect and Building News the organ of publication of the Institute; and a proposition that the Institute should use its influence to have an act of Congress passed compelling the adoption of the metric system was laid on the table. The Convention adjourned to meet next year in Philadelphia, at such time as the Board of Trustees should determine.

An evening reception by the Baltimore Chapter, a dinner at the Rennert House, with visits to one or two buildings of note, and to Mr. Walter's admirable private gallery, occupied the intervals between the sessions.

THE interesting point in the dinner at Rennert's was a speech by Mr. John H. B. Latrobe of Baltimore, son of the former architect of the Capitol at Washington, in which he gave an account of his father's early experience in this country, and set forth vividly the difficulties that beset the first architect of any acquirements who found employment here.

Architects of our day who have suffered at the hands of vexatious committees, or been at the mercy of overbearing commissioners, may think they have experience of the annoyances and ill-usage which at last drove the elder Latrobe from his position as architect of the Capitol; but they are not likely to be called on to face the difficulties which he did, when having succeeded, after hard labor, in introducing a supply of water into Philadelphia, he had to be escorted to first let on the water, under the protection of six stalwart brothers-in-law, as a body-guard against the attacks of a mob who had promised to punish the "damned Frenchman" for meddling with their city.

THE quarrels of Mr. Artingstall of Warrington, England, with his builders and architects, have attracted a good deal of attention among English architects of late. Mr. Artingstall had contracted with a builder named Collins, for some alterations to his house to be made under the direction of Messrs. Pierpoint, Hughes, and Pierpoint, architects. On certificates of the architect 750*l.*, more than half the contract price, had been paid to the builder, when Mr. Artingstall, who had apparently taken the superintendence a good deal into his own hands, declared the work unsatisfactory, and demanded that it should all be pulled away, the house restored to its first condition, and the 750*l.* refunded. A very pretty quarrel followed, which resulted in four lawsuits, — by proprietor against both builder and architects, and by both architects and builder against the proprietor. The whole was at last referred for arbitration to Mr. Leofric Temple, Queen's Counsel. His award, which has just been rendered, obliges the builder to refund 150*l.* out of the 750*l.*, leaving the building in its present condition, and makes the architect surety for the repayment, divides the whole cost equally between the builder and the architects, and orders the latter to pay forty shillings to the proprietor as damages. The award appears to rule that the architect should be held pecuniarily responsible for the quality of the work which was paid for on his certificate, the condition of the arbitration being that the issue of the suit against the builder should control that against the architect; that is, that, if the work was proved unsatisfactory, the claim for damages against the architect should be sustained. By the terms of the reference the amount of damages to be recovered from the architects was limited to the amount, forty shillings, actually awarded. The tone of the arbitrator's award leaves room for a suspicion that it might otherwise have been higher. This may be assumed to be in addition to the loss of their fee, since there is no account of the payment of any. It is to be noted, that some work of which the proprietor complained had been promptly condemned by the architects.

THE death of Mr. Charles B. Vignolles, one of the last survivors of the band of famous engineers, companions of Stephenson and Brunel, to whom Great Britain owes the construction of her railway system, has called out in the

English papers much interesting reminiscence of the early days of steam transportation. Mr. Vignolles, left an orphan in his infancy at the death of his father, a captain in the British army, while on service at Guadaloupe in 1793, was provided for in a curiously "paternal" way by the Government, which gave him a commission in the army at once, though he was only a year old. He left the army at the end of the American war in 1815, and, coming to the United States, made topographical surveys in Florida and South Carolina. Returning hence, he later took up the railway idea with energy, and was one of its most sanguine prophets. Some interesting accounts of the difficulties which opposed the early railway engineers are recalled from his address as president of the Institution of Civil Engineers in 1870. The opposition of the English gentry to the new system in its infancy is well known. Mr. Vignolles had often to make his surveys by moonlight or torchlight to avoid interference, and on one occasion was brought as a poacher before Mr. Bradshaw, the trustee of the Duke of Bridgewater's canal. He took part in the famous engine trial at Rainhill in 1829, at which Stephenson, by the exhibition of "The Rocket," substantially determined the permanent form of the locomotive. The desire of English capitalists to invest their money in building railways in France sent Vignolles to that country to advocate the system. M. Thiers, then Minister of Public Works, came to England to inspect the system with Vignolles, who reported his verdict thus, "in plain English:" "I did not believe a word of what you told me before I came; and now I cannot see the great advantages you were constantly dwelling upon. . . . As for your roads, they are very good; but I have not met a merchandise wagon on them during the whole of my journey. I do not think railways are suited to France." This judgment of the shrewd French statesman, who so vigorously survives his travelling-companion, may be put beside an article in "The Quarterly Review," written when the project was first brought forward, which says, "As to those persons who speculate on the making railways generally throughout the kingdom, and superseding . . . every other conveyance by land and by water, we deem them and their visionary schemes unworthy of notice;" and again, speaking of an anticipated speed of eighteen miles an hour, "We should as soon expect the people of Woolwich to suffer themselves to be fired off on one of Congreve's ricochet rockets, as trust themselves to the mercy of a machine going at such a rate." It may be added to the notice of Mr. Vignolles, that his family claim to be descended from the celebrated Vignola.

IN late researches at Pompeii, a series of wooden tablets has been found containing the accounts of a banker named Lucius Cecilius Jocundus. They were incased in a small wooden box, of which the outside had been considerably charred. The tablets are leaves as thin as pasteboard, tied together in threes by a cord passing through holes in the edges. The two outside pages are bare and smooth, serving as covers; the four inside pages coated with wax, and containing accounts which have not yet been fully examined, but appear to be mainly records of loans. A bronze bust of the banker, bearing his name, has been found near at hand. The excavations go on steadily, but not very rapidly, two or three scores of men being employed under a government subsidy of sixty thousand francs. About two-fifths of the area of the town have been examined up to this time. The whole nomenclature of streets and houses has been changed recently, by the way: the old names, given on account of some peculiarity characteristic of the location, are to be thrown away; and instead of the familiar and picturesque names, Consular Way, Street of the Tombs, House of the Tragic Poet, House of Pansa, we are to have No. 45, Block 11, Ward 4.

THE NEED OF UNITY.

THERE has been lately a good deal of aspiration and effort to give the profession of architecture its proper place in the American community, — or perhaps it is better to say, its deserved consideration, since its proper place can hardly, as yet, be accounted fixed. The body of architects have gained greatly in influence and respect during the last score of years or so. And the first reason why they have gained is that they have become a body; that is to say, they are now a class of men, fulfilling a special function in a somewhat uniform way, and with more or less of common understanding among them. Fifty years ago, there was no such class here. The men who designed buildings were, ordinarily, the men who built them; and it was only in rare cases, and for structures of unusual importance, that the two or three men in the country who made a profession of designing were called upon. The position of these men was anomalous and individual: most people had nothing to do with it, knew and thought nothing about it. As towns grew, and building increased, architects became more common; but their position and influence were for a long time determined in each case only by the success and action of the individual. It was but slowly that they were accepted as a class, or that any defined usages grew up in their relations to the public or their clients.

Even now these relations and usages are far from being universally determined and recognized. Not only are architects not yet accepted as the authoritative arbiters in all matters of design that many of them think they should be; but, among people at large, their authority, responsibility, compensation, and especially the manner of dealing with them, are by no means uniformly established. But if we consider also, how far architects are from having an accepted standard either of taste, style, or practice, among themselves, and with how slender a stock of acquirement many of them set to work, we shall perhaps conclude that as much confidence is given them as they have, on the whole, shown themselves entitled to. It should be remembered that respect is not a gift, but a tribute; and the individual or the body who would acquire it in a community as independent as ours must compel it. Particular architects have won it by force of talent or business capacity; but the success of the profession, as a whole, will be unsatisfactory so long as its standard of performance is uncertain. Something may be accomplished — a good deal has been accomplished, in a business way — by the general consent of architects, as well as by the direct efforts of the American Institute, in fixing a regular scale of charges, and certain general rules of conduct. A closer defensive alliance would, of course, have its effect upon clients, and in some respects is desirable. But, so long as practice and taste vary among us as they do, an architect's action will carry only the weight due to his own personal repute: the fact that it is professional will add little to it. In matters of design especially, in which the profession would like to establish its supremacy, where also the business client is expected to show most deference, if he finds doctors divided among themselves, he will either run after the fashionable man of the hour, or else, being naturally self-reliant, will think that in the conflict of authority his own judgment is as safe a guide as any. In neither case is he likely to recognize the existence of any more absolute standard than the fancy which he chooses to follow.

The business difficulties which beset the practice of architecture are troublesome, and are increased by the want of perfectly definite usage in respect of duties and responsibilities; but they will be more easily disposed of than the æsthetic ones. The experience of business men, helped by the common effort of practitioners, may be trusted to settle them in due time. The important function of architects here and now is to lead in the development and shaping of

the most pervasive, the most permanent, the most costly, and practically the most important of the arts. The demand for it among us is enormous, and apparently will continue indefinitely. The public interest in it has already become keen. But in design, the ways of the profession are far more discordant than in their business practice. One architect adheres more or less closely to one style, another to a different one; others shift constantly from one style to another; more still design without special regard to any style. We are far out of the track in which our grandfathers went contentedly and not unsuccessfully; nor have we yet agreed to walk in any other. As we look forward, the prospect doubtless is full of hope. There has been in the last few years a great gain in professional acquirement among architects. Not only are there many more well-trained men in the ranks, but the standard of performance of the average practitioner has risen greatly. Examples and the means of study have multiplied astonishingly. Architects have grown inventive and enterprising, instead of plodding on in the old paths. But these advantages have brought their attendant difficulties. Enterprise tends to outrun discipline. We are overwhelmed with the abundance of precedent at our hands, and help ourselves with eagerness from all sides, grasping at new forms, and pressing them into service. For the present this condition is inevitable: we must be content to accept and acknowledge it. The architectural aspect of the country as a whole is, and is likely to be for a long time, simply confusion. There seems to be no short way to unity. There is no city like London or Paris, where a man or men of commanding genius, if such should arise, could secure a sufficient following to compel a movement in a definite direction. There is no distinct tendency to the general pursuit of any of the styles we draw from; and it is a labor for generations to work the elements of them all into an harmonious whole.

Apart from their business relations, architects are called upon to do two things for their clients. First, they have to invent certain suitable dispositions for dwellings, business houses, public buildings, churches, — dispositions to meet the wants of a community whose growing habits are fast taking shape. There is no danger that this will not be done satisfactorily, for it must be. The clients are men whose eyes are quick for whatever their practical convenience and comfort require. As fast as the habits of domestic business and public life become defined, their requirements will become explicit and compulsory; and our architects have a ready inventiveness to meet any want which is clearly seen. Second, they have to develop suitable architectural and decorative forms for their structures, and more or less for all the fittings of them. In this it belongs to them to lead the way; to find it, in fact. Now, the constant change from one style to another confuses judgment; and men are busy with comparisons of this or that kind of detail, when they should be thinking of the underlying principles of design on which all good work must rest. Observers are influenced in their approval by their preference for one or another decorative form, instead of considering the essential character of the designs to which they are applied.

The confusion of the public taste is typified in the aspect of our cities. Modern London, we believe, offers the only parallel to the tumultuous incoherence of the architecture of American towns. Not only is there danger that purity of taste and the sense of unity in design will be smothered in this confusion, but it seems as if men would lose the belief that there is good taste and bad taste, and fairly agree that one thing is as good as another. It is a standing reproach to Americans, that they ignore the value of training (except each one in his own business); and in nothing is the reproach more just than in matters of art. Our profession cannot, to be sure, assume a mission to meet all this single-handed. We cannot arrogate to ourselves the lofty function of dictating the public taste; but it is laid upon us to execute works that must influence it as much as any others, and perhaps more permanently. Yet not only is it impossible that our cities and our streets shall produce, as cities and streets, any satisfactory effect, or even be without offence, until we have arrived at a much greater harmony of treatment than now prevails; but it is also impossible, we believe, that the communities who live in them, and who must in the mass form their taste upon them, should learn to judge fairly of their architecture till their eyes are used to harmonious general effects, and trained by the habitual sight of some prevailing and consistent style. In fact, we doubt whether the mass of men can be educated to judge of any art, except they get their first training in design by constant association with some limited range of forms consistently combined and treated: nor do we believe that architects as a body, whatever may be the success of single men of exceptional gifts, can attain a mastery of design such as marks the interesting periods of architecture, except by working sedulously and unitedly in the development, conscious or unconscious, of a definite style; or even that the individual ever reaches the full measure of his power, unless by persistent study of the combinations of a limited series of related forms, that is, by following out a distinct style. At any rate, — and this is our present point, — they cannot expect to succeed as a profession in leading the public taste, so long as they pull in a dozen different ways.

The remedy would seem to be in a closer association with each other, not simply for offence and defence, but for improvement. A profession in which every member works alone in his own way, not sharing his aims or his experience with his fellows, as was the case in ours a few years ago, does not deserve to be called a profession. The most progressive profession among us, the medical, owes its success largely to the fact that the efficient members of it live in constant intercommunication of ideas. Those who stand aloof and practise in their own way, without common study or consultation, are, for the most part, those who are known by the significant name of "quacks." Fortunately, the establishment of the American Institute of Architects, and its various affiliated branches, with the formation of other clubs for like purposes, has done much to remove the greatest reproach of the profession. The establishment of architectural schools is working in the same direction. Interchange of ideas and experience, the stimulus of common study and criticism, the contagion of a hearty interest in the same problems, and in the advancement of a common object, will be the most powerful influences in giving character and unity to our work, as well as in establishing the taste, and insuring the support, of the public. We have ability, training, individual discipline, among our architects; there is every incentive and every opportunity for a vigorous development. But, so long as the professional trumpet gives an uncertain sound, we cannot wonder if it fails to command a loyal following.

REPORT OF THE NINTH ANNUAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.

Held at the rooms of the Maryland Historical Society, on the 17th, 18th, and 19th of November, 1875.

DELEGATES and members were in attendance from all the Chapters of the Institute excepting the Albany Chapter. The convention was called to order by the Secretary at about half-past ten on Wednesday morning; and the President, Mr. Upjohn of New York, being absent on account of illness, — on motion of Mr. Walter, the president of the Philadelphia Chapter, Mr. Hunt, the vice-president of the New York Chapter, was called to the chair. The annual address was then read by Mr. Van Brunt of the Boston Chapter, and was accepted with a vote of thanks by the

assembly. Reports were read and accepted from the Board of Trustees, the Treasurer, the Committee on Publications, the Committee on Professional Practice, and from all the Chapters except the Albany Chapter. The address and the reports occupied the whole of the morning session, which was followed by a recess of an hour.

After the recess, the Chairman called Mr. Walter to the chair; and the Convention proceeded to the election of officers. Mr. Sims of Philadelphia, the late Secretary of Foreign Correspondence, having died since the last Convention, Mr. Van Brunt was elected as his successor; and all the other officers and standing committees of the past year were re-elected. Mr. Haight of New York, a member of the Board of Trustees, spoke in favor of electing a majority of the Board from other Chapters than that of New York, for the purpose of familiarizing the members of other Chapters with the cares and workings of the Institute, and enabling them to judge, since there had been considerable call for reduction in the annual expenses, whether the necessary work could be done more economically. Mr. Wight of Chicago, though bearing instructions from his Chapter to urge a reduction of expenses if it were practicable, deprecated Mr. Haight's suggestion to change the Constitution of the Board, and objected to any movement which would transfer the head-quarters of the Institute from New York.

The report of the Committee on Publications was then considered; and the Secretary called the attention of the Committee to the proposal of Messrs. James R. Osgood & Co. of Boston, to publish an architectural journal, and their desire to secure the good-will of the Institute for it. Mr. Longfellow, after explaining the proposed character and conduct of the paper, offered the following resolution, which was voted; it being explained, in answer to some inquiries, that the Institute was not expected to be responsible for the opinions of the journal: —

Resolved, That the Journal of Architecture to be published by Messrs. Osgood & Co. be accepted by the American Institute of Architects as the organ of publication of the proceedings of its Conventions, and of such other matters as it may think it expedient to make public; and that the Committee on Publications be directed to co-operate with the editor to that end.

It was made clear during the debate upon this resolution, though without a formal vote, that the separate issue by the Committee on Publication of the Report of the Convention was not to be discontinued.

The report of the Committee on Professional Practice was next taken up; and on motion of Mr. Van Brunt the following resolution was passed: —

Resolved, That the abstract of a projected tract on competitions, as presented by the Committee on Professional Practice, be re-committed with instructions to prepare the same for publication for the use of the profession; and that the Committee on Publications be directed to publish the completed report, and the secretary to distribute the tract among the Chapters of the Institute.

Mr. Haight presented to the Institute a standard metre of brass, which Dr. Alfred Meyer of the Stevens Institute of Technology had prepared, together with a letter of presentation from Dr. Meyer. The metre was accepted, and a vote of thanks to Dr. Meyer was passed.

Mr. Van Brunt, under instructions from the Boston Chapter, inquired what action the Convention would take with regard to the exhibition of architectural drawings at the Centennial Exhibition.

Mr. Littell moved that the Board of Trustees be requested to take such measures as would best insure the representation of the works of American architects at the coming Centennial Exhibition.

Mr. Haight, on behalf of the Board, stated that it had directed one of its members to obtain information from the Centennial Commission as to what might be done in the matter, but that the member was not present at the convention. He deprecated the responsibility that the resolution might put upon the Board, of collecting and deciding among the drawings that would be offered; saying that the authority to make selections was liable to be abused, and that the Board, at least if it exercised such authority, was sure to be abused. After some further debate, in which the difficulty of providing the Board with the funds necessary for efficient action was urged, the motion was withdrawn.

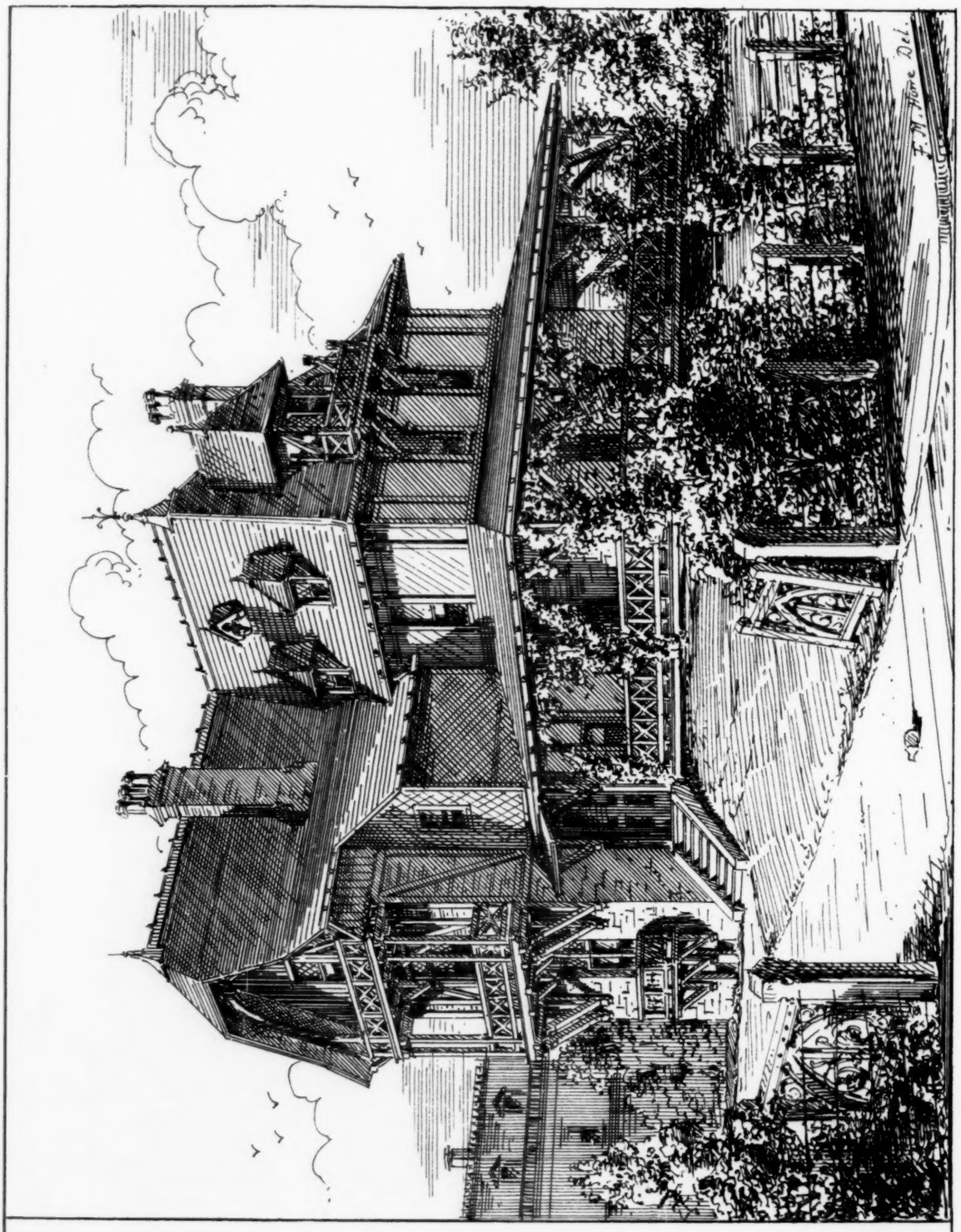
Mr. Wight gave some account of the exhibition of decorative art last year in Chicago, which had been very successful, both popularly and financially. He regretted that the lack of any sufficient appropriation by the State of Illinois would have prevented the State Centennial Board from giving the necessary assistance to any movement in Illinois, to make such an exhibition at Philadelphia next year.

Further discussion followed concerning an architectural exhibition at the Centennial, in the course of which Mr. Walter remarked, that since the whole arrangement of works of art in the Centennial had been put by the commission into the hands of the Superintendent of the Fine Arts Department, Mr. Sartain, he did not see that the Convention could undertake to arrange how the architectural exhibition should be conducted. As it appeared to be the opinion of the Convention, that it was impracticable for the Institute to carry out any general scheme for it, it was finally voted, on motion of Mr. Hunt, that the Chapters of the Institute be requested to take such means as should be necessary in order to be properly represented at the Centennial Exhibition.

The Convention then turned to the discussion of the metric system. Mr. Van Brunt stated that requests had been made to the Boston Chapter to take measures for presenting a petition to Congress to make the metrical system obligatory throughout the country, and that the Chapter had instructed him to bring the matter before the Convention.

Mr. Hunt spoke in favor of the system, noticing the ease with which calculations of all kinds were made in it, and the difficulties of the other systems in use. Its essential value was in the close alliance of all weights, measures, and moneys. Under that system, anybody could make a measure or weight of any piece of money he had in his hand. He thought, that, but for the stubborn resistance of the English, the system, which already existed in France, Switzerland, Italy, Belgium, and to a certain extent in Germany, would before this have become universal. Mr. Hutton thought that the chief advantage of the metrical system was simply that it was a decimal system, and that, if it were proposed to reform the system of measures in this country, there was more likelihood of success if the reform were not too radical. Since the foot was the familiar base of our own system, and a decimal division of the foot was already in use among our engineers, he thought it would be better to base a uniform decimal system on this familiar unit than to incur the difficulty of requiring the whole country to adapt its ways to a new one.

Mr. Haight mentioned that the metrical system had been already to some extent adopted in this country, and the use of it was extending. It was in use, he believed, in the Institute of Technology in Boston, the Stevens Institute at Hoboken, and the School of Mines in New York. The question of adopting it had come before the Society of Engineers in this country, and it would probably have been adopted, but for the fact that they had recently taken up one decimal system, and were not prepared to throw it aside immediately. The metre was kept on sale in all the instrument shops in New York; and since engineers had found no difficulty in substituting, and in inducing their mechanics to substitute, a decimal division of the foot for the division into inches, he thought there need be no difficulty in adopting the metrical system.



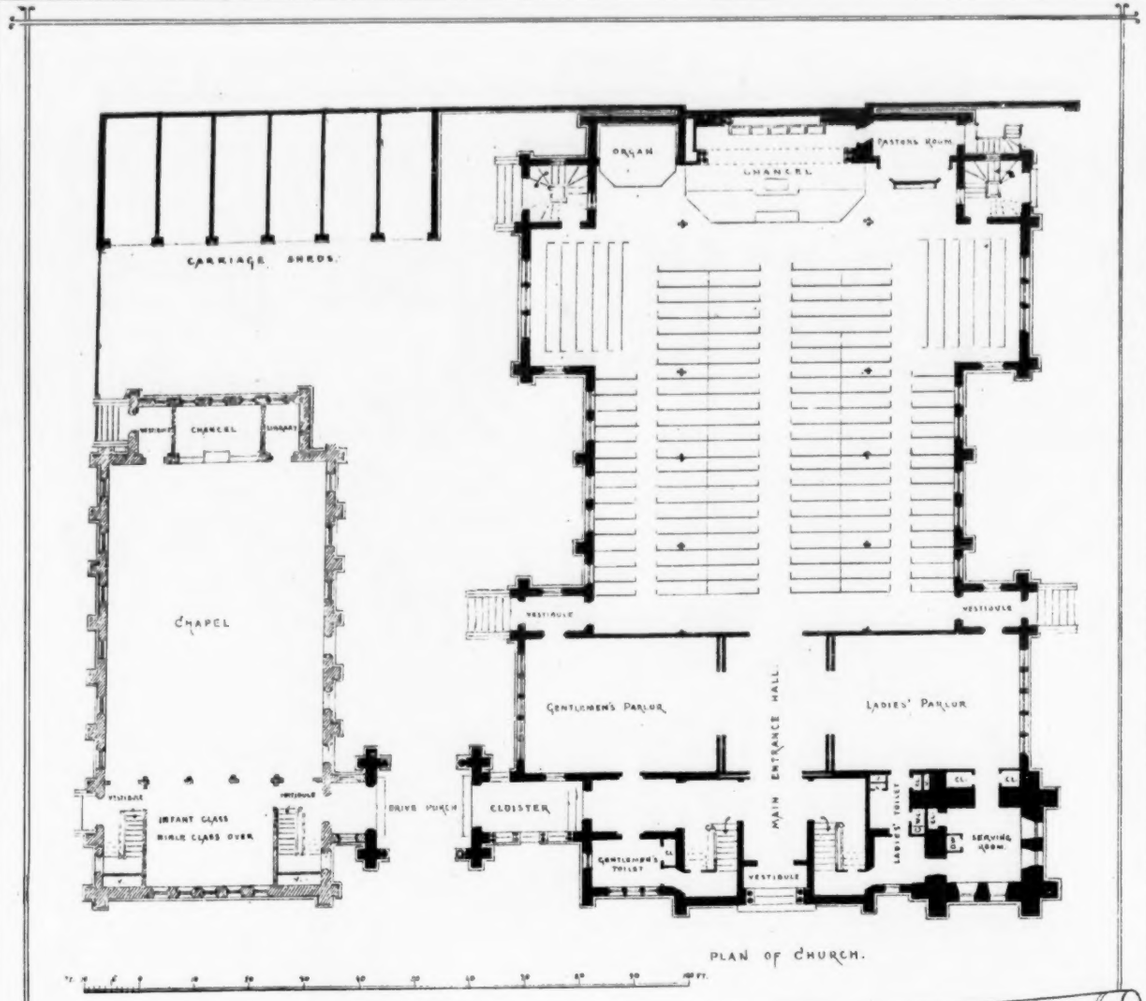
Residence of T. G. Appleton, Esq. at Newport.

Mr. R. M. Hunt, Architect, New York.

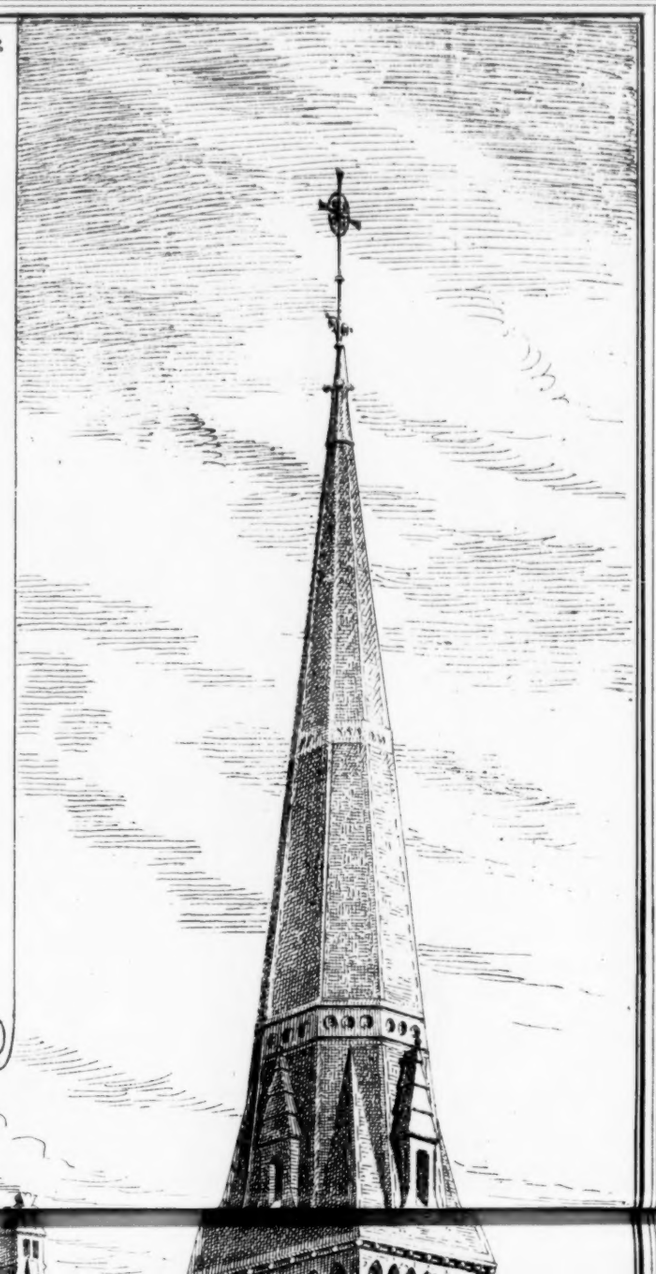
Heliotype James R. Osgood & Co. Boston

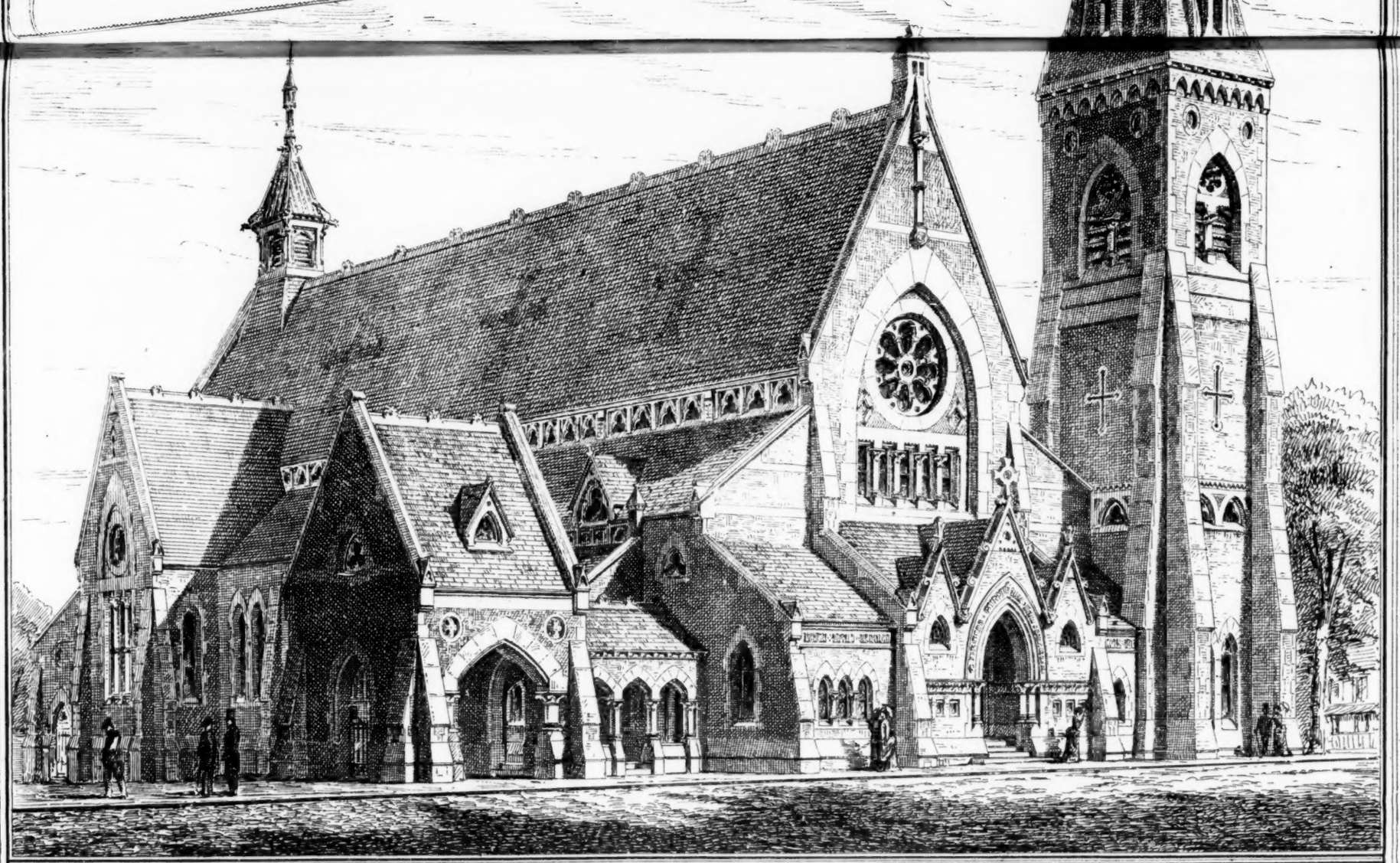
TOWER AT BERGUES

HELIOTYPE JAMES R. OSGOOD & CO. BOSTON



PLAN OF CHURCH.





CENTRAL CONGREGATIONAL CHURCH ✣ FALL RIVER ✣ MASS. ✣

HARTWELL, SWASEY & CO. ARCHITECTS ✣ BOSTON.

L. S. IPSEN. DEL.

HELIOTYPE

JAMES R. OSGOOD & CO. BOSTON

VOLUME TIGHTLY BOUND

Mr. Stone remarked, that, if the Government were to adopt the metrical system in all their work, the makers of instruments would make them with metrical graduation, and the country would easily settle down to the new system in the course of a year. He thought it very desirable to abolish the present absurd rules of measurement; instancing the fact, that while in Boston the unit of measure for stone work was a perch, somewhat arbitrarily interpreted, in Providence, only forty miles from Boston, the work was measured by what they chose to call a cord. of thirty cubic feet. The whole practice of the country was confused by these local peculiarities of measurement, all of which would be broken up if the metrical system could be introduced, and so conformity with the rest of the world be secured.

Mr. Longfellow called attention to the fact, that in the workshops of the country an immense amount of capital was invested in machinery and the products of machinery; that machines, gauges, measures, screws, pipes, &c., were all adjusted to inches and fractions of inches; that opposition from the persons who owned this capital, to a system which would require them to change all these appliances, was necessarily to be expected. He thought it very unlikely that any memorial of the Institute would induce Congress to legislate against this opposition; and would inquire whether any thing had been done or could be done to interest machinists and manufacturers in the change, and to forestall their opposition by inducing them to so adjust their gauges and machinery as to make the change easy.

Mr. Frederick advocated the metrical system because it was in harmony with the cosmopolitan tendencies of the day. He classed it with the railroad, telegraph, and other influences of civilization, which were removing the barriers between nations, and bringing the people of the world into union. He favored the metrical system because it had been already adopted in so many countries.

After some further discussion, the whole subject was laid upon the table; and the Convention adjourned till Thursday.

THE ILLUSTRATIONS.

THE ROCK STREET CENTRAL CHURCH OF FALL RIVER, MASS. MESSRS. HARTWELL AND SWASEY, ARCHITECTS.

THIS church, of which we give a double-page illustration, is built of brick; the wrought stone work, — sills, string-courses, water-tables, quoins, archivolts, cross, &c., — of olive-colored Nova Scotia freestone. The chapel, indicated in the plan by a lighter tint, is not yet built, and is omitted in the perspective view. The main church is about one hundred and fifty feet long, the breadth across the nave and aisles sixty-six feet, across the transept eighty-nine feet. The height of the spire is one hundred and eighty feet. The buildings are planned to suit the habits which now prevail in Congregational parishes, and which require the addition of rooms for social purposes to the church proper. The church itself consists, as the plan shows, of a nave, aisles, and transept. A broad gallery covers the rooms marked as parlors, and the passage between them, so that the second story of these, as it were, is taken into the body of the church, of which the whole length is thus made one hundred and thirty-one feet. The roof is open-timbered, the clerestory framed in wood, and filled, like the windows in the walls, with stained glass. The church committee, we are sorry to learn, insisted on the solecism of filling the windows of the rooms which are to be used for social purposes with plate glass. The pillars which carry the clerestory are iron pipes of three and four inches in diameter, in groups of four set a little apart, with compound capitals and bases of cast iron, and banded together between these. The roof is covered with slate; the cresting, finials, and gutters all of copper. The entrance porches have polished shafts of red granite.

HOUSE AT NEWPORT, R.I. MR. R. M. HUNT, ARCHITECT.

The lower story of this house is built of rubble-stone; the upper, of wood covered with slates laid in colored patterns, a mode of construction which is becoming not uncommon at Newport of late. It is a common habit there, to use slate only for the wooden walls of houses, using shingles for the roof, which make a tighter and securer covering; an important point in a climate so wet as that at Newport, and where many of the houses are left unoccupied for a great part of the year. A characteristic detail of many of the houses is the curb-gutter, which is set upon the roof-boarding, just above the eaves, instead of being hung beneath it, and supported there by a series of small brackets.

THE CLOCK-TOWER OF BERGUES.

Bergues is a market town of about six thousand inhabitants, half a dozen miles from Dunkirk, whose fortunes it has shared in many bitter fights. It was Flemish in its origin and most of its history; and its architecture, as well as its people, therefore, is much more Flemish than French. It was built in the sixteenth century, and was badly restored at the beginning of the present. It is about one hundred and fifty feet high, and contains a bell which weighs thirteen thousand pounds, and a famous carillon. Our illustration, taken from a plate in Coney's "Cathedrals," gives the angle-turrets and the belfry cupola an undue appearance of clumsiness.

SANITARY ENGINEERING.

BY GEORGE E. WARING, JUN.

THE DRAINAGE QUESTION.

IN the interest of sound building, it is of the utmost importance that those who are charged with the construction of houses, especially for residence, should concern themselves not only with matters of taste, and of economical and substantial construction, but with the fulfilment of the chief (because the first) purpose of all building, that of providing protection against influences injurious to health. The first use of the house was doubtless to furnish shelter against exposure whose influence would be permanently or temporarily injurious to the physical condition of those for whom it was prepared. The mere provision of shelter has so long been accomplished that this consideration no longer enters into the conscious idea of those who build.

But there has arisen within a comparatively short time, as an incident to the adoption of modern household conveniences, the knowledge of other influences to which the human frame is subjected, which equally demands the wisest and most careful attention. The disposal of the wastes of human life has always in modern times led to grave dangers, especially where men were living in communities; but until the introduction of the water system, these wastes, however much neglected, exercised their injurious effects through means which it was not especially the province of the architect to consider. Now the case is bravely changed. Every house of any pretension is provided, as a matter of course, with certain arrangements for the removal of its liquid wastes, which it has been too often the custom of architects to treat simply as matters of specification, and over which they exercised less personal supervision than was given to more conspicuous parts of their work. Such and such closets, such and such tubs and basins and sinks and water-pipes and soil-pipes, being provided for, it has generally been understood that the contractor would sub-let the execution of these constructions to a plumber; and practically the sanitary architecture of our houses has generally been left to the almost unguided management of a class of mechanics who, however skilful they may be in their trades, seldom, if ever, have the requisite knowledge of sanitary matters to avoid very serious, and often very fatal errors.

It is possible, of course, to include all that the strictest demands may require in the specifications for plumbing work; but the knowledge of these requirements is limited to so small a class that it is not to be wondered at, that not alone plumbers, but the majority of architects themselves, are not only entirely wanting in it, but, having never given it thought, are entirely unconscious of its importance.

The range of the question, so far as construction is concerned, is not extended; but the circumstances under which the work is done are so varied that something far beyond mere technical knowledge is required to enable those having the control of house-building to provide in all cases all that may be needed. We propose, so far as our limited space will allow, to give such practical directions as seem necessary in connection with the requisite arrangements for cleansing the domicile of its waste matters without

endangering the life and health of its occupants; and, in addition to this, to adduce such evidence, and to bring forward such general considerations, as may be needed to induce a due regard for the importance of the subject, — to the end that the same skilful advisers who are providing the country with its tasteful and convenient houses may with equal success act in their legitimate capacity as the guardians of the health of those for whom they build.

In its practical bearings the drainage question has to do with water of two sorts, acting in two entirely different ways: —

1. Soil moisture. This is the natural water of the earth, which by its influence under and against the foundations of houses, in the floors of cellars, and in the surrounding land, tends to the direct production of certain troublesome diseases (some of them fatal); and whose influence often causes such a lowering of the vital energies as to make the system more susceptible to the malarial influences for which it always acts as a ready vehicle.

2. The waste water of the house. This is the water which having served its purpose in the economy of human life, or in the daily operations of the household, has been rendered foul and offensive, and is to be got rid of as refuse. This waste matter is open to all of the objections which obtain in the case of soil water, and in addition is often the source of direct and active poisons.

The entire office of the builder is by no means accomplished when he has provided for the exclusion of soil moisture from the house itself, and for the removal beyond its walls of its liquid wastes. Usually, in the case of a house with complete plumbing arrangements, this liquid, however offensive it may be, does not become dangerous until after it has passed beyond the house, or even the ground where it is produced; but the means adopted for its removal are far too often — indeed, this is true in a very large majority of instances — the readiest and surest means for the return to dwelling-rooms of the poisonous effluvia which, later in its course, it has had time to generate.

The question of sanitary drainage confines itself to these two items and their wide-spread bearings; but incidentally to their consideration, it will be necessary to discuss the question of house-ventilation, and of warming, so far as relates to the action of the peculiarly noxious gases arising from the combustion of anthracite coal.

The sanitary question is, of course, a very serious one; and in New York, owing to the fact that many of the drainage works now existing were constructed in the very infancy of the art of sewering, it is perhaps even more serious than elsewhere in the country. Ignorance of the true requirements of the system have been seconded by cupidity and almost wilful neglect in producing a state of affairs which have for the past twenty years been well known to be shameful. Sewers which have no outlets, sewers which deliver into smaller ones lying at a higher level, sewers which are highest at their outlet ends, sewers which have been built for no other earthly object than to provide work for contractors, are to be found everywhere in the older parts of the town. In addition to this, most of the sewers made during the first twenty years of the work were in every way unsuited to their purpose, almost always so large as to become little better than elongated cesspools filled with the accumulated filth of years; frequently so badly constructed as to lose their form, and to break open, and leak their liquid contents into a porous soil; and, in general, as ill adapted to their destined work as it is possible for any human construction to be.

These sewers are frequently closed by the tide so that they have in themselves no outlet for the gases formed by the decomposition of their contents; no provision has been made for the dilution of these gases with the common air; their wide, open mouths exposed to the pressure of high winds, and their air-spaces subject to constant fluctuations and disturbances, which force their contents to seek a vent through the only available exit, and pass the futile water-traps which were intended to exclude it from houses. In general terms the whole system of the old New York drainage may be described as a series of retorts in which the foulest and most dangerous of gases are being hourly manufactured, carefully provided with branch-drains and soil-pipes and waste-pipes, and the overflows, sinks and wash-basins, and bath-tubs, all serving to conduct it immediately into every part of the interiors of nearly all of the houses in the city.

This difficulty has existed for a very long time, has grown slowly and surely, and has established itself as a source of disease and death of almost incalculable magnitude. There can be no safety short of a universal adoption of certain simple but very radical means by which, whatever dangers may arise in the condition of the sewers themselves, these shall be deprived of their present universal power of communicating these dangers to the insides of houses. The difficulty is far too grave and serious to be contended against by the emotions. Probably the least desirable action against all sanitary evils is the arousing of a sanitary panic. The danger must be met bravely, but it must be met seriously and coolly. It not a thing of the day only; it is no sudden attack, against which the instant energy of the community can be effectively aroused, but a long-existing siege which can be raised only by systematic and persistent countermining .

Let it be repeated that in this case, as in all cases, panic is worse than useless. After any sudden and fearless arousing of public sentiment there is sure to follow a re-action of apathy and indifference.

We are now witnessing one of the inevitable accompaniments of a state of public fright; and, although the actual sanitary dangers of New York are not overdrawn, the discussion that they have recently aroused has been encumbered by the invention of dangers which never existed, and has been clouded by the ventilation of pet theories which, in the interest of the public health, should have been allowed to rest undisturbed with their inventors. The Board of Health of the city is composed of skilful, earnest, and accomplished sanitarians, who only need the confidence and encouragement of the community to enable them to prosecute such reforms, and to make such improvements, as are requisite to inaugurate a healthful condition, and to secure the people against the dangers which now so constantly threaten them.

As an instance of the delusions with which it is attempted to bother the question, none is more apparent than the often-repeated theory that the great unhealthfulness of New York is due to an interference with its old water-courses. It has been asserted that these water-courses have been, in the construction of new streets, entirely disregarded, and dammed back in a way to create a feverbed of every low-lying area in their neighborhood which it was possible by such damming to overflow; and a crude chart, much of it of a fanciful character as to the location of these water-courses, has been used in support of the theory. The objections to this theory are several. It has not been usual, in building new streets, materially to obstruct the flow of any considerable natural water-course. Culverts have, as a rule, been provided amply sufficient to carry the stream; and the filling material itself has usually been of so porous a character, that even without the culverts its obstructive power would be slight. The exposed ponds recently existing between the street fillings near Fifth Avenue and Fifty-ninth Streets, for example, existed as a large pond or swamp before the street improvements were built. It is not true that the areas of typhoid fever and diphtheria have coincided in any marked degree with the land said to have been flooded in this manner; and, what is of the most importance, these overflooded areas are not necessarily unhealthful. If the soil on which a house is built have a depth of three or four feet above the water-table, whether that water-table exists at its natural level or at a higher level, or whether the soil is natural or artificial, that soil is not necessarily insalubrious; provided that, as in New York is generally the case, the water-table does not rise nearer than this distance to the surface. Every objection that has been brought forward against this supposed underlying moisture holds with equal force against any rock or clay foundation which prevents the downward filtration of water. It is well known, that wherever there is too little protection of a tolerable soil between the water-table and the level at which a house is built, or the surface of the ground about it, there is danger of malaria; and malaria arising from this source renders those living under its influence more susceptible to the attacks of filth-contagion.

The remedy in the case in hand, as well as in the case of all building on ground not absolutely well drained, lies not with the drainage authorities of the town, but with the builder of the house. Impervious foundations, and impervious cemented cellar floors — such foundations and floors as ought in every case to be used; especially in city houses, with their furnace-heated and imperfectly ventilated cellars, should always be insisted on — will secure the inmates of the house against any influence arising from below, though the house be built in a stagnant pool of filthy water, or on a soil made of street-sweepings.

If the alarmed population of New York City will quiet its suddenly expressed fears so far as to allow the competent authorities, having the direction of such matters, to secure, as they should have the right to do, the inmates of every house against the ingress of sewer gas, and against the evil effect of decomposition taking place in waste-pipes by the action of foul emanations, the great difficulty will be overcome, and the present alarming fre-

quency of pythegenic disease will cease. If, in addition to this, the sewers themselves be frequently ventilated by the simple and well-proved process of bringing them into frequent communication with the common air in the middle of the streets, there will be little danger of a return of the present stultifying panic. The authorities may then safely and properly proceed with a reformation of the badly constructed sewers of the city. These sewers will remain a source of foul and dangerous gas until they are thoroughly rebuilt; but it is possible by the simple means of efficient sewer and soil-pipe ventilation to put it out of the power of these gases to exercise their destroying influence on the population as they now do.

The subject should not rest, of course, until the necessary reconstruction of sewers has been properly accomplished; but it is possible to introduce with great rapidity such protective measures as will at once restore the town to a tolerable state of health.

The system of water sewerage is open to grave objections on several grounds, chiefly of an economic character; but in its sanitary bearings it is, if properly carried out, more nearly perfect than any system yet devised for a large town, and is capable of securing to the city of New York a reduction of its annual death-rate to one-half the present frightful standard.

VIOLLET-LE-DUC'S ANNALS OF A FORTRESS.

M. VIOLLET-LE-DUC, known everywhere as an architect, and as perhaps the most accomplished and learned of his profession, has also his avocation, in which, indeed, he is scarcely less distinguished, of military engineer. If his "Story of a House" was the recreation of an architect, the present book[1] is no less the recreation of a military engineer. Both of these works are clever to the last degree; and both have the singular attractiveness which belongs to the easy performance of an expert off duty, — an expert whom we feel to be perfect in skill and accomplishment, and who is evidently entertaining himself no less than his readers.

In the book before us, the author has created an imaginary plateau, forming the summit of a bluff on a river-bank, in that portion of France lying between Rheims and Lyons. He supposes the plateau to have been occupied as a stronghold by the earliest inhabitants of the region, long before the Roman invasion, and by successive races of conquerors ever since. With each new occupation, the system of defences, at first rude and primitive, has been improved and refined to meet the changes in the methods of warfare. He constructs for this stronghold a history, during which it becomes the theatre of seven distinct sieges, stretching from the earliest ages to the present day. The story of these sieges, and of the successive systems of attack and defence, is told with remarkable liveliness and vigor, and with a minute attention to detail as to the design and construction of the various portions of the military works and the manœuvres on both sides, which not only makes the narrative extremely interesting, but enables the reader to gain as much as it is necessary for an unprofessional person to know of the science and the history of military engineering. There is scarcely, we should imagine, a device known to that science, whether in the way of instrument, construction, or tactics, which is not more or less fully illustrated here; and there is great ingenuity in the detailed accounts of the various instruments employed in the earlier sieges, before gunpowder had come to revolutionize the system of warfare. The battering-ram, the catapult, the mantelet, the cat, the moving tower, the Greek fire, and other clumsy but formidable contrivances, figure in these pages with very picturesque effect. A certain personal interest is also imparted to the story by the novel-like manner in which the successive families occupying the stronghold are introduced; notably in the case of the feudal castle of Roche Pont, and its defence against the Duke of Burgundy.

When the fortress had withstood its fourth siege, the introduction of gunpowder made necessary extensive changes in the defences to adapt them to the new methods of attack. The fifth attempt was made by an army of Louis XI., the place being held by the Burgundians; and the account of this siege reads like a budget from the *special* of some enterprising newspaper.

As we come further down towards our own time, we have a stirring narrative of the defence of the fortress by the troops of Henry IV., against an attack of the Imperialists; then another, not less stirring, of the attack of the allies upon it in 1814, when the fighting was put a stop to by the abdication of Napoleon; and finally a concluding chapter, in which the old defences of Vauban, so formidable even in the days of the first Napoleon, are brought face to face with the rifled cannon of the Germans in the desperate war of 1870. The place was not attacked; but, had it been, "it could not have held out forty-eight hours before the German artillery. A few batteries on the north, on the plateau, and on the west and east, placed on the sides of the hills two miles distant, would have overwhelmed the place, without the possibility of replying."

Then follows, compressed into a few vigorous, earnest, and rather sad pages, the whole moral of the book; namely, the continual change in methods of war, and in the character and efficiency of the weapons used, and the absurdity of trusting to the defences of yesterday to resist the attacks of to-day. The writer briefly sets forth what he conceives to be the system of fortification most likely to hold out against the modern artillery and the modern armies; but, after all, "We must confess," he says, "to a limited confidence in fortifications on this immense scale. It is certain that they are ruinous; it is not certain that they are effective in proportion to the enormous expense they occasion. . . . Cannon are made whose balls pierce through and through the wooden planks of a vessel. Immediately these planks are cased with iron. To-day's balls are resisted by the vessel's sides. Forthwith the penetrating force of the projectiles is increased. The plates of iron are doubled, but the projectiles of the next day pierce them. Steel is made to take the place of iron; but, after thousands upon thousands have been spent, the projectile has always the best of it. . . . In fortification we are exactly at the same point as were the men-at-arms of the fifteenth century, who heaped plates on plates of armor to protect themselves from artillery. It is time the art of fortification should be modified. . . . Still the best fortress for a country is a good and well-commanded army, and a well-educated, brave, and intelligent population, resolved to make every sacrifice rather than undergo the humiliation of a foreign occupation."

Finally, in proportion as we are satisfied and even charmed by the intelligence, vivacity, and knowledge of this book, in proportion as we are touched by the seriousness and mortification of the concluding pages, in which the author enforces the lesson which his nation could only learn through the bitter ignominy and shame of a foreign conquest, are we astounded by the last sentences of the book, which reveal to us the true son of France, in all his native and inalienable wrong-headedness: "Patriotism is the only human passion which can be dignified with the title of holy. War makes nations, and war raises them again when they sink down under the influence of material interests. War is struggle; it secures greatness and duration to the best educated, the most capable, the noblest, the most worthy to survive. . . . Whenever what is called fraternity between nations shall become a reality, the reign of senile barbarism and of shameful decay will not be far distant."

[1] Annals of a Fortress, by E. Viollet-Le-Duc. Translated by Benjamin Bucknall, architect. Boston: J. R. Osgood & Co.

NOTES AND CLIPPINGS.

WASHINGTON, Dec. 24, 1875.

THE officials of the Department of State have now become permanently settled, with all their archives, in the new building south of the old Navy Department, and seem to be well pleased with the internal arrangements. Two large rooms in the basement have, for the present, been assigned to the library; the chief secretary and the two assistants occupy rooms on the first floor; and the elevator is greatly appreciated by the clerks in reaching the upper rooms. On the score of ventilation, I believe the new executive building meets with general approbation.

Nearly one-half of that square in this city, which fronts the Treasury Department and is flanked by Willard's Hotel, has recently come into the possession of William W. Corcoran; and upon this land he contemplates the early erection of one or more important buildings; and active operations will commence with the opening of spring. This new improvement will bring into the rent-market a large number of first-class stores and offices; and, if they are not all monopolized by the General Government, the effect will be to make that famous locality more lively and cheerful than it has hitherto been. The plans for this new building have not yet been decided upon.

The Corcoran Art Gallery continues to be a pleasant resort for cultivated people; but there seems to be a want of enterprise in making new additions to the several departments of art. Its en-

dowment is nine hundred thousand dollars, and its annual income about seventy thousand dollars; and yet the novelties are few and far between. Excepting a few pictures by American artists, nearly all the additions made by the trustees thus far have come from France; and the fact is certainly amazing, that the gallery does not contain a single painting by a first-class English painter of the modern school.

Outside of politics, perhaps the most common topic of conversation in Washington just now is the Centennial Exhibition, or rather the prospect of securing a Congressional appropriation of $1,500,000 for the exhibition. The tide seems to be in favor of giving a favorable answer to the earnest prayer of the Philadelphians; and as two or three hundred Congressmen, and a somewhat smaller number of newspaper correspondents, have been on a visit to the Quaker City, the prospects are brighter than they were. Whatever may be done by Congress to help the Centennial, is, however, still in doubt; but this one thing is certain: the people of Washington are impatiently hoping that all the hosts who may visit Philadelphia next year will not fail to visit the metropolis for the purpose of enjoying a good view of the Washington monument. The rare beauty of the work, the rapid manner in which it has been built, and the evidence it affords, that the American people are proud of their country, and loyal to the last degree, cannot fail to make a lasting impression.

THE Massachusetts State Board of Centennial Commissioners has issued a circular addressed to all authors and publishers of scientific works in the State, and scientific bodies which publish their proceedings, to contribute their productions to the State exhibit. They also invite for the science section contributions of philosophical instruments and apparatus, both for experiment and illustration, and for practical uses, as well as examples of engineering, maps, globes, and general representations of scientific work; all of which they propose to collect and arrange, to give an idea of what has been done in the Commonwealth for the progress and diffusion of scientific knowledge. For the educational section, they invite special historical and statistical reports of educational systems and organizations, representations of buildings, furniture, and fittings, and also text-books and books of reference, specimens of scholars' work, and all printed documents that bear on the subject.

A SET of four pairs of bronze doors, intended for the Hypothecary Bank of Buenos Ayres, has been cast in London. They are all double-leafed, the upper portion being fixed. The size of the largest is eighteen feet eight inches, by eight feet seven inches, and the weight of each five tons. The design is rich and massive, the thickness of the meeting stile being ten and one-fourth inches. Each leaf was cast in one plate, only three-sixteenths of an inch thick, the ornamental panels being afterwards secured thereto in such a manner that neither screw nor rivet head can be seen from the front; and they then have the appearance of one casting: by this means it was possible to undercut the various mouldings, so giving to each a clear and sharp outline. The doors are hung to the frames by six pairs of hinges to each leaf, with steel washers and pins; and, to prevent deflection, a gun-metal roller, with steel axle, is fixed under the bottom of the meeting stile, working on a fixed quadrant; and in consequence, notwithstanding the immense weight, they can be opened and shut easily by a boy. The whole of the enrichment is highly chased, relieved, and burnished.

THE new Roman Catholic Cathedral lately dedicated in Boston is one of the largest churches, for any thing we know the largest, thus far completed in the United States, and would be a large church anywhere; but it is absurd and misleading to speak of it as larger than Strasburg Cathedral, to which its front would form a very ample porch; or than Salisbury with its four hundred and fifty feet of length, its double transept two hundred feet across, and its spire four hundred feet high. Several of the Boston papers have given descriptions of it which are diverting. It is rather strange, that in a city where the directory contains the names of something like a hundred and fifty architects, any one of whom might have saved them from a variety of droll blunders, the reporters of the daily papers should not have taken some advantage of their opportunities. In the accounts of the dedication of the church, the names of the participants are given, down to the holders of the candles, whose service was the duty of an hour or two; but we have not found in any of the descriptions of the building a mention of the name of the architect, Mr. Keeley, whose work is to be conspicuous possibly for centuries.

A SKATING mania as acute as that which possessed our country a dozen years ago seems to have come upon England. Rinks for skaters of both sexes are built and building in all directions. London is sown with them, and they are springing up everywhere in the provincial towns. Drill-halls, assembly-rooms, swimming-baths, sheds, cricket-grounds, or any available areas, are converted into them. They are built open or covered, of all practicable shapes and sizes; one at Brighton is said to be one hundred by three hundred and sixty feet. The commoner shape naturally is an elongated rectangle, and with an arched or trussed roof; the central part of the area being occupied by the skating-field or "ice," and dressing-rooms, skate-depots, refreshment-rooms, sometimes galleries, and even a reading-room and an orchestra, arranged about it or connected with it. The "ice" is depressed a little below the surrounding floor, and of course is not ice at all, but an artificial surface. In some cases a floor of hard pine in narrow strips is used, after the American fashion, but more commonly a surface of cement alone, or covered with asphalte. The cement surface is found to wear the skates badly; and the smoother asphalte, though it is apt to grow slippery when wet, is preferred,—not the wretched compound of coal-tar and gravel which passes by the name with us, be it remembered; but the asphalte of Paris, from Pyrmont, a carbonate of lime mixed with bitumen, which, dry and pulverulent when cold, is put down hot, and brought almost to a gloss for the skaters. Its dark color is said to be most agreeable to the eyes of the skaters, and to give somewhat the look of ice. The skates, of which there are many kinds in use, with boxwood rollers on bearings of gun-metal, are so nicely fitted with springs as to adjust themselves to all the varying pressures of the feet, and enable the skater to execute the most difficult and delicate movements with precision.

IN the December number of "Scribner's Monthly" is an article called "The Site of Solomon's Temple Discovered," which intends to give a summary of the results of the explorations which Mr. S. Beswick, an engineer of New York, has been making for some time at Jerusalem. Mr. Beswick's investigations, we may guess, will prove very interesting when they are published; and, if his conclusions are verified, the results will be extremely valuable. But it is impossible to form any judgment on them from the article in "Scribner's," which is utterly without method and confused. It is fortified by a terrible array of figures. We are surprised to find the height of the top of the holy mountain above the Mediterranean set down to the ten-thousandth part of a foot (say the thousandth part of an inch); when the long dimensions of the Temple are refined down to the hundred-thousandth and even the millionth part of a foot, and we find the visitor qualifying dimensions that are only carried out to the ten-thousandth part with the cautious expression "about," we are lost in wonder; but by a little examination we find that these exact figures are only the careful reductions of round numbers of cubits, which would seem to imply that Mr. Beswick had measured the whole area in cubits, and found all the principal dimensions come out neatly in integers and generally in multiples of ten. The two salient points, apparently, of Mr. Beswick's conclusions, the location of the centre of the Temple on the very summit of the old rock Sakhra, and the statement that the Court of the Gentiles surrounded but three sides of the Temple, are reiterated with emphasis; but the general scheme of his topography, and the mass of evidence on which it rests, are presented in such confusion that to unravel them is beyond the patience, and we fear beyond the intelligence, of most magazine-readers. On the whole, it seems necessary to wait for Mr. Beswick's own statement before one can venture to judge of the value or the meaning of his discoveries.

It is not fair to criticise "Scribner's" without mentioning the general excellence of the woodcuts in it. In two or three articles of the December number, the illustrations are really admirable.

THE father of the late French painter Troyon has established a biennial prize to be awarded by the Academy for the best landscape on a given subject. This year's prize has been decreed to a M. Debat-Ponson, pupil of Cabanel: the subject was a hollow road bounded by large trees, and crossed by a stream with a ford.